



# **Strategic Plan: Appendix B: MARS Process and Software Objectives**

**Version 1.1  
July 29, 1998**

# **Draft**

**Appendix B. MARS Process and Software Objectives.**

Process	Software Module	Key Objectives	Major Open Issues
Purchasing, Payables and Disbursements	Purchasing/Workflow	<ul style="list-style-type: none"> <li>Establish means to handle all types of Commonwealth purchases and contracts</li> <li>Establish streamlined bid process using Web and Client Server Technologies</li> <li>Provide extensive system support for users making purchases on the system</li> <li>Provide streamlined processing for high volume requisitions and purchases using workflow capabilities</li> <li>Establish process monitoring capabilities to monitor efficiency and effectiveness of workflow</li> <li>Establish split central and operating agency maintenance of workflow administration</li> <li>Capture commodity history to use in acquisition planning and negotiations with vendors</li> <li>Eliminate source document paper files to a significant extent</li> <li>Provide the buyers with a rich suite of tools to assist in making and tracking purchases</li> <li>Provide software-based support making and recording pro-card purchases</li> <li>Provide capability to record and enforce volume, tiered, and other discount terms</li> <li>Provide Web based capability for registering new vendors, vendor invoice inquiries, requisitions and ordering from catalogs.</li> <li>Create automated generation of notices regarding late deliveries, contract renewals and others.</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of an appropriate commodity scheme of classification</li> <li>Establishing shared match logic with ADVANTAGE</li> <li>File synchronization with ADVANTAGE</li> <li>Coordinating commodity scheme of classification between needs of Purchasing, automated match, and inventory</li> <li>How many users will need access to both PD and ADVANTAGE</li> <li>Scalability based on the number of non-buyer users</li> <li>Integration of PD with ADVANTAGE inventory module</li> <li>Encumbrance policy and requirements</li> <li>Electronic signature requirements</li> <li>Security of web responses for bids and vendor registration.</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Purchasing, Payables and Disbursements	Travel Accounting	<ul style="list-style-type: none"> <li>Establish Web based access to MARS travel voucher transaction for any Commonwealth Employee</li> <li>Establish sufficient ease of use that the average employee can successfully enter the travel voucher and inquire as to its status.</li> <li>Provide appropriate functionality, edits, and controls to support and enforce Commonwealth travel policies</li> <li>Provide appropriate tracking capability to allow employees and process managers to determine status of a particular voucher</li> <li>Provide sufficient functionality to handle third party payments, and other predictable variations.</li> <li>Allow for entry by other than employee in designated circumstances (to handle entry by executive assistants or data entry personnel)</li> </ul>	<ul style="list-style-type: none"> <li>Whether ADVANTAGE workflow can adequately meet routing, staging, and inquiry needs for travel vouchers entered through the Web.</li> <li>Access to appropriately connected PC's for all employees</li> <li>Whether paper versions will have to be maintained indefinitely for some users.</li> <li>Implementation of Kentucky-specific requirements.</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Purchasing, Payables and Disbursements	Accounts Payable/ Disbursements	<ul style="list-style-type: none"> <li>• Reduce the number of vouchers payable by consolidated multiple invoices on single transactions</li> <li>• Reduce the number of checks by consolidating multiple vouchers onto a single check</li> <li>• Reduce the paper sent to the Treasurer</li> <li>• Exploit discount capabilities by paying on discount due dates</li> <li>• Establish efficient 1099 reporting</li> <li>• Setup MARS to be the checkwriter for selected external systems</li> <li>• Establish ability to pay third parties</li> <li>• Establish offset logic with receivables and with Tax systems</li> <li>• Establish highly automated two and three way matching with automated payment voucher generation</li> <li>• Establish the framework for future EDI.</li> <li>• Establish EFT and two way match options and on a vendor by vendor basis.</li> </ul>	<ul style="list-style-type: none"> <li>• Role of Treasurer in effort to streamline disbursements process</li> <li>• Number of general ledger entries generated from external payables</li> <li>• Number of different check tape formats from external systems</li> <li>• Scalability of system: can it handle the nightly cycle within the batch window on nights where external payables reach peak volumes</li> <li>• How MARS can consolidate 1099 information from external systems with MARS 1099 data to yield comprehensive 1099's</li> <li>• Integration between Procurement Desktop and ADVANTAGE</li> <li>• Highly automated matching processes will be complicated by the fact that some documents are in Procurement Desktop (PO's and Receivers) and some are in ADVANTAGE (Vendor Invoices)</li> <li>• Enforcing volume and tiered discount terms established in PD</li> <li>• User interface differences between functions entered in PD versus ADVANTAGE</li> <li>• Accounting distributions must be entered in PD at the commodity line.</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Budgetary Preparation and Control	Budget Preparation/ Control	<ul style="list-style-type: none"> <li>Automate and streamline the budget preparation process</li> <li>Establish phases during which only appropriate users have access</li> <li>Establish phase shift controls that allow centralized control of budget preparation phases</li> <li>Provide powerful "what-if" analysis tools to budget preparation users</li> <li>Establish electronic forms for the initial capture of budget requests</li> <li>Provide powerful position budgeting and salary forecasting tools to assist in the budget preparation process</li> <li>Provide the ability to capture and analyze historical data during the preparation of the budget</li> <li>Establish the ability to provide initial budget guidelines prior to agencies preparing their budget requests</li> <li>Establish the ability to prepare agency management budgets, legal appropriation budgets, budget allotments and revenue forecasts in coordinated and controlled fashion</li> <li>Provide the ability to automatically load approved budgets into the budget control structures of MARS</li> <li>Provide for Appropriation level budgeting and reporting</li> <li>Provide for Allotment of appropriation budget. Provide controls at this level</li> <li>Provide for Agency Management level budgeting, control, and reporting.</li> <li>Provide appropriate cash level controls</li> <li>Provide powerful analysis tools for within-year, within-biennium budget monitoring and forecasting.</li> <li>Provide an audit trail of budget and actual transactions that permits reporting of budget status at any point in time</li> <li>Provide flexible controls (e.g. full, variance reporting, no control) that can be controlled centrally or varied by fund or agency</li> <li>Ability to handle a variety of complicating real world situations including: <ul style="list-style-type: none"> <li>The necessity of loading and controlling by a preliminary budget</li> <li>The replacement of a preliminary budget with a final budget after actuals have been posted</li> <li>The ability to adjust, revert, &amp; transfer budget authority during the fiscal year</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The level of change in the budget preparation cycle will be significant.</li> <li>The means by which stakeholder enrollment across multiple management structures and branches of government has not been determined.</li> <li>How cash controls will be implemented</li> <li>Usage of Budget Preparation software by Legislative Branch has not yet been defined.</li> <li>Usage and interaction of budget preparation software with capital planning requirement and effect on next cycle's capital budget requests has not been determined.</li> <li>Should agencies have discretion to reserve budget at the time a purchase order is created, (except for capital and highway construction.)</li> <li>Whether to prepare project and Grant budgets in BRASS or ADVANTAGE</li> <li>Whether to use BRASS for monitoring and reporting on actuals posted against budgets</li> <li>Scalability of BRASS and Bandwidth requirements</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Management Reporting	Management Reporting	<ul style="list-style-type: none"> <li>Establish a reporting database on an independent platform to avoid contention with the production application</li> <li>Establish user friendly data structures that facilitate ad hoc reporting</li> <li>Provide access to data appropriate for different classes of users (e.g. executive, casual, power user, external users)</li> <li>Provide electronic report distribution for ad hoc and standard reports</li> <li>Maintain a library of ad hoc reports that users from different agencies can access by users in different agencies</li> <li>Establish new ad hoc and recurring reports with run time parameters which allow the Commonwealth to tailor the reports for specific users without programming or configuration tasks</li> <li>Produce as many of the new reports required as is practical using Crystal Info</li> </ul>	<ul style="list-style-type: none"> <li>Determining which users should have desktop reporting tools</li> <li>Determining whether the Commonwealth will store non-MARS data in the reporting database</li> <li>Establishing automated procedures for the regular updating and synchronization of the reporting database</li> <li>Establishing a plan for the natural growth and evolution of the reporting database after implementation</li> <li>Establishing Crystal Info access to production and reporting database files.</li> <li>Determining whether there will be limited external user access to the reporting database (e.g. for vendor inquiries)</li> <li>Determining the appropriate storage capacity and processing power of the reporting database</li> <li>Determining whether both Crystal Info and Web access to the database are to be facilitated</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Revenue and Receivables	Accounts Receivable	<ul style="list-style-type: none"> <li>Establish centralized receivables tracking</li> <li>Establish decentralized (agency) control of billing cycles and invoice format</li> <li>Establish centralized (perhaps lockbox based) remittance processing (possible future enhancement)</li> <li>Establish offset processing between MARS receivables and payables (and with tax systems)</li> <li>Establish ability to interface detailed receivable information for legacy sub-systems.</li> </ul>	<ul style="list-style-type: none"> <li>Project intent</li> <li>Agency and Treasurer enrollment</li> <li>Whether and how a pilot will launched for centralized receivables and remittance processing.</li> <li>Whether MARS will have to establish additional permitting, correspondence, and customer care logic to replace existing agency receivables functionality</li> </ul>
General Accounting	Non Purchasing Workflow	<ul style="list-style-type: none"> <li>Use Workflow software to handle travel vouchers, selected reference table maintenance, internal orders, straight disbursements, budget control revisions, and others</li> <li>Ability to provide an electronic document audit trail sufficient to allow elimination of paper</li> <li>Ability to flexibly centralize and decentralize maintenance for part or all of a workpath</li> </ul>	<ul style="list-style-type: none"> <li>The extent to which MARS facilitates non purchasing workflow (this may not be completely known until August of 1998 when code becomes available from the New York City Project.</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
General Accounting	General Ledger	<ul style="list-style-type: none"> <li>• Appropriate Mapping of Current Coding Scheme</li> <li>• Appropriate Setup to Support CAFR Reporting and budgeting requirements</li> <li>• Appropriate Setup to Support Trial Balances by Attributes other than fund (e.g. agency and program)</li> <li>• Take advantage of software's ability to distinguish between fiscal and budget fiscal years</li> <li>• Establish split maintenance of reference tables (i.e. financial accounting elements maintained centrally, cost accounting elements maintained by agencies)</li> <li>• An efficient and comprehensive year end close process</li> </ul>	<ul style="list-style-type: none"> <li>• Number of Records in the General Ledger compared to STARS</li> <li>• Whether MARS can support trial balances for all required coding attributes</li> <li>• Whether MARS administration can delegate appropriate maintenance duties to the agencies (particularly for sub objects and sub revenue sources)</li> <li>• Whether the chart of accounts is comprehensive enough to meet Commonwealth requirements</li> <li>• Whether BRASS, Procurement Desktop and ADVANTAGE have a common chart of accounts.</li> <li>• Whether to use "CAFR on Micro" for CAFR reporting</li> </ul>



Process	Software Module	Key Objectives	Major Open Issues
Fixed Assets and Inventory	Inventory	<ul style="list-style-type: none"> <li>Establish comprehensive inventory system that allows warehouse and consolidated views of available inventory</li> <li>Establish integration with the Purchasing Module so that 1) users can see what's in stock before placing order, 2) users can create automatic reorders from inventory system based on management controlled parameters, and 3) receipts can be made directly into inventory.</li> <li>Provide the appropriate costing bases to support various Cabinets (e.g. average cost, FIFO, other)</li> <li>Ability to flexibly provide for both purchase and consumption basis of inventory accounting</li> <li>Ability to handle all inventory events (including receipt, adjustments, transfers, draws, pick and issue, over the counter transactions, orders, back orders, physical inventory, etc...)</li> <li>Ability to provide appropriate reporting on inventory activity and usage</li> </ul>	<ul style="list-style-type: none"> <li>The level of integration of Procurement Desktop and ADVANTAGE Inventory has not been defined.</li> <li>Coordinating commodity scheme of classification between needs of Purchasing, automated match, and inventory</li> </ul>
Fixed Assets and Inventory	Fixed Assets	<ul style="list-style-type: none"> <li>Establish comprehensive fixed asset tracking and reporting for both accounting and management purposes</li> <li>Establish appropriate basis for fixed asset accounting for both governmental and proprietary funds</li> <li>Ability to handle the entire fixed asset life cycle (including acquisition, placement in service, depreciation, transfer, betterment, sale, retirement, disposal, and others)</li> <li>Establish integration between purchasing, payables and fixed assets modules so that fixed asset information carries forward from purchase orders and additional required information can be entered at the time of receipt for processing additions when invoices are entered.</li> <li>Ability to establish disposal rules so that fixed asset history reflects disposal and the appropriate revenue entries are made for sale of retired fixed assets.</li> </ul>	<ul style="list-style-type: none"> <li>The Commonwealth has not yet determined what will be tracked in the Fixed Asset Module. (i.e. just assets that are financially reportable?)</li> <li>The level of integration between Fixed Assets and Procurement Desktop has not yet been determined.</li> <li>The feasibility and need for a physical inventory as a project activity prior to MARS implementation has not yet been determined</li> <li>Policies and requirements for tracking capital leases in the Fixed Asset module have not yet been determined.</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Grants, Projects and Cost Accounting	Grants, Projects, Jobs, Cost Allocation	<ul style="list-style-type: none"> <li>Establish Agency control over budgeting, reference table maintenance, reporting, and back end processing with minimal central coordination to ensure efficient, effective compliance with Cash Management Improvement Act of 1990.</li> <li>Establish an appropriate scheme of classification that accommodates diverse budgeting and reporting needs of Commonwealth Agencies</li> <li>Establish budgeting for each appropriate cost accounting element independent of the financial budget structures</li> <li>Establish cost allocation from any accounting distribution to any other accounting distribution</li> <li>Establish Cost allocation on appropriate bases (e.g. relative, statistical, percentage, other)</li> <li>Establish separate Inception to date files to support cost accounting needs that span state fiscal years.</li> <li>Establish appropriate billing and reporting processes to support internal and external needs</li> <li>Provide appropriate functionality to efficiently meet CMIA requirements and which additionally facilitates a streamlined cash draw process.</li> </ul>	<ul style="list-style-type: none"> <li>Meeting the diverse cost accounting needs of the various agencies</li> <li>The implementation of CMIA will be complex and could require significant analysis.</li> <li>The work breakdown structure for the Transportation Cabinet may be difficult to accommodate using the existing MARS coding block.</li> <li>Will current allocation interfaces continue, or be replaced by MARS functionality</li> <li>Ability to expend against grants for awards not yet received.</li> </ul>

Process	Software Module	Key Objectives	Major Open Issues
Internal Ordering	Internal Orders	<ul style="list-style-type: none"> <li>Establish a seamless purchasing process regardless of source of goods.</li> <li>Establish the ability to handle all internal order related events including order, billing, receiving, approval, payment, overhead markup, corrections, etc...</li> <li>Establish the ability to monitor the status of an order</li> <li>Ability to encumber internal orders</li> <li>Flexible settlement that allows payment or due to/due from entries</li> <li>Assistance to the user to help him understand what is available from internal sources and what is not.</li> <li>Ability to set up and use internal service funds</li> <li>Ability to combine materials, services, and markups on a single billing</li> <li>Ability to perform periodic billing based on a set of collected actuals</li> <li>Ability to establish, account for, and bill based on charges to a work order or job.</li> <li>Ability to include allocated cost in an internal billing</li> <li>Flexible billing that allows discretionary charges, pre-set rates or prices, or other basis of billings</li> <li>Integration with inventory to include charges for inventoried items on an internal bill</li> </ul>	<ul style="list-style-type: none"> <li>Functionality in PD versus ADVANTAGE.</li> </ul>